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WS-263

February 1983

Wheat

OUTLOOK & SITUATION

Table 1--Wheat: Supply, disappearance, area, and prices, marketing years 1979-82*

Item	1979/80	1980/81	1981/82 (prel.)	1982/83 (proj.)
		Million bushels		
Supply				
Beginning stocks, June 1	924	902	989	1,164
Production	2,134	2,374	2,799	2,809
Imports 1/	2	3	3	4
Total	3,060	3,279	3,791	3,977
Domestic disappearance				
Food	596	611	600	610 ± 5
Seed	101	114	112	100 ± 5
Feed 2/	86	51	142	165 ± 30
Total	783	776	854	875 ± 35
Exports 1/	1,375	1,514	1,773	1,600 ± 150
Total disappearance	2,158	2,290	2,627	2,475 ± 175
Ending stocks, May 31	902	989	1,164	1,502 ± 175
		Million acres		
Area				
Planted	71.4	80.6	88.9	87.3
Harvested	62.5	71.0	81.0	78.8
Set-aside and diverted	8.2	--	--	5.8
Allotment/Nat'l program	70.1	75.0	84.5	--
		Bushels per acre		
Yield per harvested acre	34.2	33.4	34.5	35.6
		Dollars per bushel		
Prices				
Received by farmers	3.78	3.91	3.65	3.40-3.50
Loan rate	2.50	3.00	3.20	3.55
Target rate	3.40	3.63	3.81	4.05

1/ Imports and exports include flour and other products expressed in wheat equivalent.

2/ Residual, approximates feed use and includes negligible quantities used for alcoholic beverages.

* Totals may not add due to rounding.

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Summary

U.S. Producers To Reduce 1983 Acreage

U.S. wheat farmers will reduce acreage in 1983. The first clue came in December, when winter wheat growers indicated that they had seeded 63.0 million acres last fall—5 percent less than last year's record and the smallest acreage since 1980. The new PIK (payment-in-kind) program is expected to further reduce harvested acreage of winter wheat, even though compliance will require growers to plow down, graze, or hay their crop. Since spring wheat growers can decide on PIK compliance before planting, participation in spring wheat areas is expected to be higher than in winter areas. Thus, despite good-to-excellent growing conditions now prevailing in winter wheat regions, it appears that the total 1983 wheat crop will be smaller than the record 1982 production.

Currently, however, record-large supply continues to dominate U.S. wheat markets. Stocks on January 1—more than halfway through the 1982/83 season—stood at a record 2.52 billion bushels, only 290 million bushels less than all of 1982's output. Nearly half the stocks were in the farmer-owned reserve or owned by the Commodity Credit Corporation, leaving January free stocks 12 percent less than a year earlier.

Despite the record pace at which 1982-crop wheat has been entering the farmer-owned reserve; farm prices continue under pressure from huge supplies and lagging exports. Even with grain in the reserve topping 1 billion bushels, cash prices for some wheat classes seem unlikely to recover seasonally. The average farm price for the season is expected to be between $3.40 and $3.50 a bushel. That average would be the first since 1968/69 to fall below the loan value.

Disappearance during June-December was far below the pace of a year ago—down more than 150 million bushels. Yearend (May 31) stocks are projected to build to over 1.5 billion bushels, the largest ever.

This year's U.S. exports have been hurt by the world economic downturn, the strength of the U.S. dollar, credit constraints in some importing countries, and increased production by most major wheat exporters. Competition has been particularly stiff from the European Community, Canada, and Argentina. Projected U.S. shipments of 1.6 billion bushels are 10 percent below last season's record 1.77 billion, ending the 5-year string of increasing exports.

Even though the Southern Hemisphere's wheat harvest was slightly smaller this year than last, the record outturn in the Northern Hemisphere resulted in record 1982/83 global wheat production of 471 million metric tons, 5 percent larger than 1981's record. Except Australia, all major exporting nations harvested their largest crops ever, while importing nations produced 7 percent more than last season. World wheat trade is expected to remain about the same as last year, reflecting the same scenario: exporting nations aggressively trying to sell excessive stocks to markets that have not expanded correspondingly.

OUTLOOK FOR 1983/84

Winter Wheat Plantings Reduced

USDA's December report on last fall's winter wheat plantings provided the first glimpse at the size of the 1983 wheat crop. For the first time since 1978, farmers indicated a reduction in their seeding of wheat from the prior year. As of December 1, wheat acreage was 63.0 million acres, the smallest since 1980 and down 5 percent from last year's record 66.4 million acres.

On balance, it looks as if farmers intend to adjust acreage downward in response to 1982/83's disappointing wheat prices by turning to the 1983 acreage reduction program. Wetter-than-normal weather in southern soft wheat areas and dryness in the Southwest may also have influenced planting reductions. The effect of the total acreage reduction effort on production will be uncertain until after March 11, the cutoff for producers to sign up for the programs. Unlike last year, the major provisions of the 1983 acreage reduction program were announced well in advance of normal planting schedules, allowing producers to make compliance decisions before committing planting expenses. However, for winter wheat growers, the January-announced payment-in-kind (PIK) program was too late to affect planting. Nevertheless, it may be important in determining harvested acreage.

While total winter wheat area declined only 5 percent, the exceptional acreage expansion that has occurred in Soft Red wheat during the last 4 years (totaling nearly 200 percent) came to a halt. Seeding of Soft Red was down nearly 10 percent from last year's record. Arkansas, Georgia, Missouri, and Ohio, major Soft Red States, accounted for over 60 percent of the decrease, estimated at 1.6 million acres. Soft Red producers likely were responding to record production of the last 2 years, which had kept farm prices near or below the loan rate. In addition, the advance deficiency and diversion payments which are features of this year's Government program may have encouraged compliance. However, because a large portion of Soft Red winter wheat area is double-cropped with soybeans, growers may find it too costly to foresake two crops to qualify for program benefits.

The largest area planted to a single class of winter wheat, Hard Red, was also cut back by about 1.7 million acres, but this represents less than 4 percent of the estimated 1982 acreage of 44 million. Dry conditions in Texas and Oklahoma reduced seeding in those States from a year ago. However, the sizable planting reduction in Kansas (1 million fewer acres) may reflect intended program participation. Weather remains a big determinant. Given relatively favorable winter conditions through January, the Plains winter wheat growers may face a difficult choice in deciding whether to plow down, graze, or hay a part of their growing crop to participate in the optional PIK acreage diversion program. In the Pacific Northwest, 1983 plantings are down much less than the average for all winter wheat, but then those producers reduced their 1982 acreage through program compliance more than the nation as a whole.

Based on the reported acreage and an estimated yield close to the recent years' average of 31 bushels a seeded acre, 1983 winter wheat production could be cut 7-9 percent from last year's record 2.11 billion bushels. However, a reduction of this magnitude would not be enough to trim stock levels or strongly support prices. This points out the importance of large program participation to further reduce harvested acreage.

Seeding intentions of Durum and other spring wheat growers will be reported in USDA's Prospective Plantings report coming out in mid-February. Fall and winter precipitation over most of the spring wheat areas suggests fair to good soil moisture. Spring wheat growers are expected to react to below-loan-level farm prices by participating heavily in the 1983 acreage reduction program (ARP) and the PIK program. About 70 percent of base acreage in spring wheat areas was in compliance with the 1982 program. If only the same producers participate in 1983, the addition of the 5-percent cash land diversion (CLD) to the regular ARP means fewer spring wheat plantings in 1983. But even more important in determining 1983 acreage will be participation in the PIK program. Depending upon the expected new-crop price, spring wheat growers who divert an additional 30 percent of the base to the PIK program could realize net returns (over variable costs) that are up to $20 per acre higher than returns from nonparticipation, and $10 per acre above returns from the regular 20-percent ARP/CLD (see special article). Thus, if last year's record yields are not repeated, 1983 spring wheat production could be significantly lower than 1982's record Hard Red and near-record Durum crops.

1983 Wheat Program Finalized

In July 1982, USDA announced the details of the 1983 acreage reduction program for wheat. Basically, the program was a spinoff of 1982's ARP provisions with some added requirements and benefits to encourage higher producer compliance than the 48 percent in 1982. A grower had to reduce wheat acreage for harvest by at least 20 percent of the farm base to be guaranteed the $4.30-a-bushel target price and $3.55 loan. A new feature was an advance payment of 50 percent of an estimated deficiency payment to be paid at signup time.

In late August, Congress altered the 20-percent ARP to 15 percent but added a 5-percent cash land diversion. The diverted acres would receive $2.70 a bushel times the farm yield, and half the payment could be made at signup. The 1983 wheat loan was raised to $3.65 a bushel, but the target price remained at $4.30.

To conclude the 1983 acreage reduction effort, a PIK program was announced in January. This provision aims at reducing production and simultaneously cutting burdensome surplus stocks. It was also designed to avoid increasing Federal budget outlays. In brief, the Commodity Credit Corporation (CCC) will offer farmers an amount of wheat representing a percentage of their base program yield per acre. In exchange, producers will take additional land out of production, beyond that in the 15-percent ARP and 5-percent cash land diversion. Payments will be in terms of No. 1 wheat and will come from stocks represented by outstanding regular CCC-loans, farmer-owned reserve loans, or CCC-owned inventories. The payment amount will be determined by multiplying the designated PIK acreage by the farm pro-

gram yield by 95 percent. A farm's whole base may be eligible for PIK under a bid system. Other PIK provisions include the following:

- Signup is from January 24 through March 11.
- Initially a producer may participate by reducing acreage by an amount from 10 to 30 percent of the base. Producers may also submit bids to designate the whole farm base to the PIK program; bids will be accepted or rejected at the discretion of CCC. In no case can more than 50 percent of a county's base be idled in conserving use acres.
- Haying and grazing will be permitted on winter wheat planted prior to January 12 that is designated to meet any conservation use requirements, provided the farm is participating in the PIK program for any crop.
- Under summer fallow rules, PIK acreage will have to be land which would have been planted in 1983.
- Producers participating in PIK with outstanding price support regular or reserve loans must agree to allow CCC to use loan collateral for PIK payment. The amount made available must be at least equal to the PIK payment.
- A producer with no outstanding CCC loans may receive the PIK from wheat stored in an approved warehouse or, at CCC's descretion, may be required to put 1983 grain under loan for the PIK requirements.
- To provide the producers with marketing flexibility, CCC will pay storage at an annual rate of 26.5 cents a bushel from when the PIK grain is received until disposition, but not for more than 5 months.
- Producers that liquidate farm-stored reserve loans will be eligible to receive a payment equivalent to 7 months' storage.
- Conservation use acreage requirements vary according to the planted area. An example for a 100-acre wheat base with 50 acres planted includes 15 acres under the ARP, 5 acres under the CLD, and 30 acres under PIK, for a total of 50 acres.

Provisions of the 1983 reserve program, which were announced simultaneously with PIK, include the following:

- Entry will be permitted only after the 9-month regular loan period.
- The reserve loan rate will be the same as the regular loan—$3.65 a bushel. Storage payments will remain at 26.5 cents per bushel per year.

Likely PIK Impact

The key to reducing U.S. wheat production in 1983 is producers' response to the entire acreage reduction effort, particularly PIK. As indicated earlier, with the 1982 reduction requirements up only 5 percent, the acreage decrease would only be modest compared with the drop needed to bring supply in line with demand. However, with the PIK program, total harvested acreage may decline an additional 10 million acres beyond the ARP and CLD reductions. For example, if yield averaged about 36 bushels per harvested acre, 1983 wheat production could be lowered to around 2.4 billion bushels or 400 million below last year's record. A reduction of this size would keep yearend stocks (1983/84) from a further buildup. Even more noteworthy, farmer-owned reserve stocks would drop by as much as 300-400 million bushels. This reduction will likely increase the free stocks in the market. However, the PIK program feature which pays storage on the PIK grain and the fact that increased compliance may qualify more 1983 grain for loan might boost this summer's harvest prices some what above last year's below-loan-rate level. Although weather and final program compliance are important variables, important numbers for the 1983/84 year may look like this.

	1982/83	1983/84
	Million	
Acres harvested	78.8	65.6
Production, bu	2,809	2,380
Total ending stocks, bu	1,502	1,506
Farmer-owned reserve	1,000	765
CCC inventory	180	177
Free stocks	322	564

THE CURRENT SITUATION

Midseason Stocks Up, Disappearance Down

Wheat stocks on January 1 reached a record 2.52 billion bushels, 16 percent above a year earlier. Spawned by record supplies at the beginning of 1982/83, January stocks of every wheat class are above those of last January, ranging from 24 percent for Durum to 1 percent for Soft White wheat. Halfway through the season, indicated Hard Red Winter inventory is about the same as the entire 1982 crop, meaning that disposition to date has just equaled the amount carried over from 1981/82. Inventory in the farmer-owned reserve is also at a record high, because placements of the 1982 crop are nearly double those for 1981. Thus, January 1983 free stocks of wheat were 12 percent below a year earlier.

Even with stocks at an alltime high, June-December disappearance declined 156 million bushels from a year earlier, mainly because of a sharp drop in exports. Even if a pick up in export business increases wheat use for the remainder of the year, yearend stocks are projected to be the highest ever.

This year's seed use declined slightly as winter wheat growers reduced plantings 5 percent. Spring wheat seed use is also likely to go down. Wheat feeding during June-December seems to have followed the same pattern as in 1981/82; the economic advantage of feeding wheat disappeared with the record fall harvest of feed grains. Total feed use will likely be up about 20 million bushels from last season's 142 million, but will still represent only 7 percent of total utilization. Although the wheat mill grind was accelerated during the first half of the season, an increased amount of this flour production went to the export market under Public Law 480 programs. Low and stable wheat prices often encourage domestic consumption. But, this factor may be offset by current economic conditions, which have probably affected food-away-from-home consumption. Thus, 1982/83 domestic wheat product consumption may be hard pressed to exceed annual trend growth.

Wheat: Supply and disappearance

Item	June-December 1981/82	June-December 1982/83
	Million bushels	
June 1 stocks	989	1,164
Production	2,799	2,809
Total supply 1/	3,789	3,976
Exports	1,050	861
Food	361	356
Seed	83	78
Feed	117	160
Total disappearance	1,611	1,455
January 1 stocks	2,178	2,521

1/ Includes imports.

Season's Exports Lower

U.S. export activity during the first half of the 1982/83 marketing year has been significantly affected by the world economic downturn, the strength of the U.S. dollar, foreign exchange constraints in some importing countries such as Eastern Europe, and increased production by most major wheat exporters. For the remainder of the year (July/June), trade competition will be particularly stiff from Canada and Argentina, where this season's wheat shipments are expected to rise 12 and 86 percent, respectively, over last year. The most notable development, though, is the growth of the European Community (EC) as an exporter. The EC was shipping 5 to 9 million tons a year in the latter half of the 1970's, but its shipments are projected at 17 million tons in 1982/83.

The United States and Australia are the only major exporters who will sell less this season than last. Projected U.S. loadings for 1982/83, at 1.6 billion bushels, will be 10 percent below last year's record 1.77 billion and will also reverse a 5-year trend of successive increases. As of late January, Soviet purchases from the United States totaled 3 million tons, nearly 50 percent below last year. India has been one of the few bright spots in the export market, with sales more than double a year ago.

In a continuing effort to counter sluggish export demand, an additional amount of at least $1.25 billion, beyond the original $500 million, has been authorized for the "blended credit" export program for use in fiscal 1983. This program combines $250 million in interest-free direct credit with Government-guaranteed private credit to produce interest rates below commercial levels. So far, Morocco, Egypt, the Philippines, Yeman, and Brazil have used blended credit to buy U.S. wheat. Another effort to aggressively compete in world markets was announced by USDA whereby CCC stocks will be used to enable U.S. flour exporters to sell 1 million tons (50 million bushels grain equivalent) of U.S. flour to Egypt at prices competitive with other commercial flour sold to Egypt.

Wheat stocks under price support programs, cumulative by months, 1982 crop

End of month	Loans outstanding	Grain reserve	Total
		Million bushels	
June	6	6	12
July	12	94	106
August	24	182	206
September	51	283	334
October	66	346	412
November	72	393	465
December	74	422	496

Source: Agricultural Stabilization and Conservation Service loan activity reports.

Season Prices Remain Low Despite Record Reserve Entry

Despite the record pace at which 1982-crop wheat is going into the farmer-owned reserve, prices continue under pressure from exceptionally large supplies, lagging exports, and generally depressed grain markets. Even at midseason, prospects may be limited for a seasonal recovery of cash prices for some wheat classes, and some futures prices could see only marginal strength. At this time a year ago, July (1982-crop) futures contracts in all markets were above $4 a bushel; all current 1983-crop July contracts range from $3.40 to $3.85 a bushel. More solid information is needed on the effects of the acreage reduction and PIK programs before the price outlook will change.

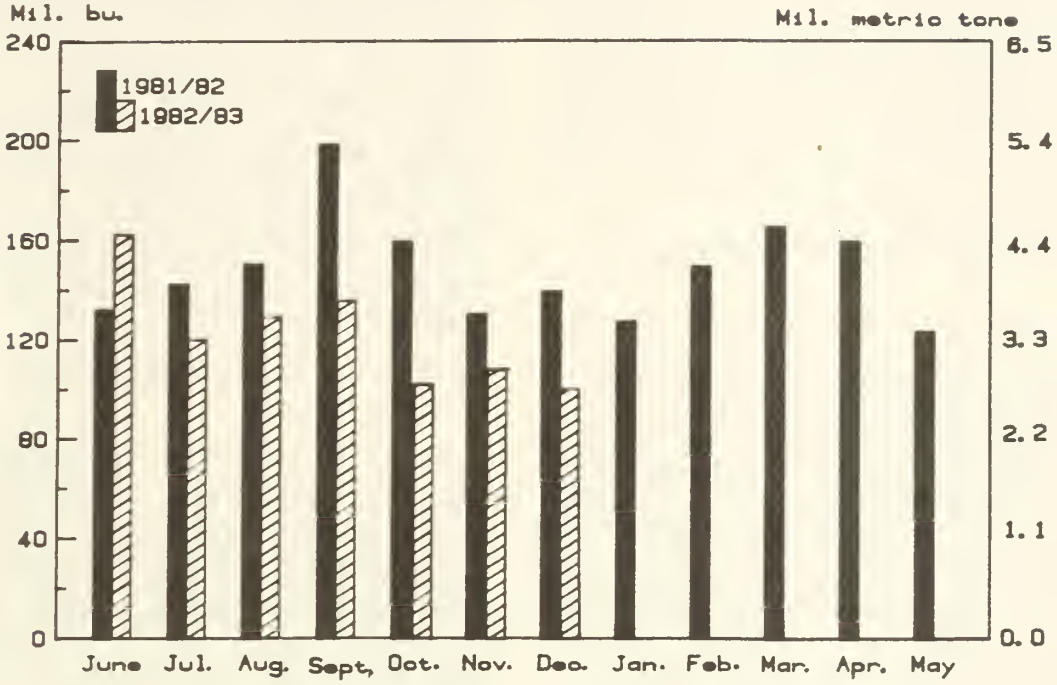
Key price factors in coming months are the export pace, the condition of the 1983 winter wheat crop as it comes out of dormancy, and the enrollment in the ARP and PIK programs. As of late January, the quantity of outstanding sales appears large, but most of it has already been reflected in the market. Thus, considerable new sales are needed to spark price movement. Also, an indication of heavy program participation would help offset production prospects implied by the current

U.S. Average retail prices for cereals and bakery products, 1982

Cereals and bakery products:	Oct.	Nov.	Dec.
	Dollars per 1-pound		
Flour, white all purpose	0.22	0.22	0.22
Rice, white, long grain, precooked	NA	NA	NA
Rice, white, long grain, uncooked	.49	.49	.48
Spaghetti	NA	NA	NA
Bread, white pan	.53	.53	.54
Bread, French	.92	.90	.93
Bread, whole wheat, pan	.82	.82	.83
Bread, wheat blend, pan	NA	NA	NA
Rolls, hamburger	.79	.81	.81
Cupcakes, chocolate	1.77	1.80	1.83
Cookies, chocolate chip	1.79	1.82	1.80
Crackers, soda, salted	.90	.90	.94

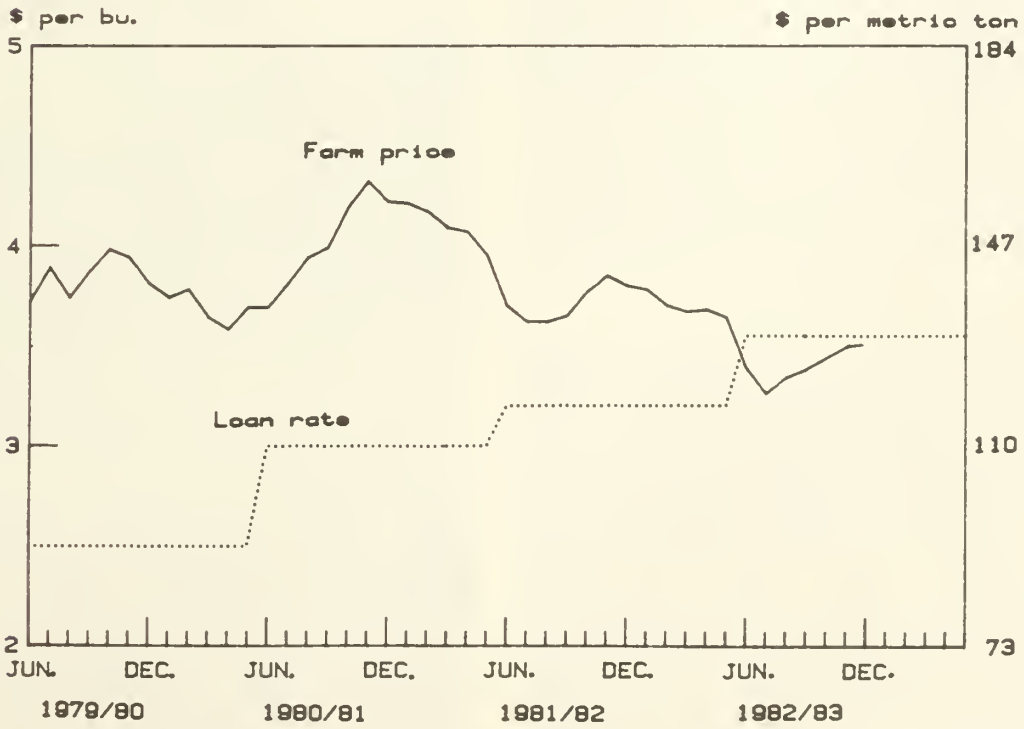
NA = Not Available.

U. S. Wheat Exports by Months, Marketing Years 1981/82 and 1982/83



Includes flour and products in wheat equivalent.

Wheat Prices Received by Farmers



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widespread favorable condition of the 1983 winter wheat crop. However, expectations of above-average yields work against program participation.

Farm prices for the first 7 months of the marketing year averaged around $3.40 a bushel, 15 cents below the national average loan rate. This compares with prices 50 cents above the $3.20 loan for the same period a year earlier. For the season, an average farm price between $3.40 and $3.50 is expected. Such an average would make 1982/83 the first season since 1968/69 with a season price below the loan value.

1982/83 WORLD WHEAT

Global Production To Hit a Record

The Southern Hemisphere's 1982 wheat harvest is nearly complete. Australia is harvesting the smallest crop since 1972, and another crop shortfall is expected in Brazil. In contrast, Argentina's outturn will be the largest ever. Combined with record or near-record wheat production in the Northern Hemisphere—the United States, Canada, the European Community, China, Mexico, Turkey, and India—global wheat production in 1982/83 is estimated at a record 471 million metric tons, 5 percent above the 1981/82 harvest. All major wheat exporting nations except Australia harvested their largest crops ever. The major exporters' 1982/83 production was 3 percent above 1981/82 and represented 39 percent of this season's total world production. Among nations which need to supplement their own production with imports, 1982/83's wheat outturn was 7 percent larger than a year ago. From this overview, one can understand the current aggressiveness among exporting nations to dispose of excessive stocks to markets that have not correspondingly expanded demand.

Because of increased global wheat production, consumption is expected to be a record 458 million tons, after declining about 1 percent in 1981/82. Some of this expansion may be tied to population growth, while some may be the result of reduced 1982 world rice production in key areas. However, 1982/83 wheat production will outdistance use, causing a 13-million-ton increase in world wheat stocks, to slightly below 1978/79's record level of 101 million tons. The United States will account for 10 million tons of the increase and hold 43 percent of these carryover stocks, up from 39 percent last year.

World Wheat Trade To Remain Large

The volume of world wheat trade during 1982/83 is expected to remain largely unchanged from last year's record 102 million tons. However, there will be some shifts in volume among major exporting countries. Most significant will be the lower export projection for U.S. wheat, aggressive marketing by competitors, and reduced Soviet buying. Despite the recently implemented U.S. blended credit program, U.S. wheat exports will be at least 10 percent below last season's record 48 million tons. In comparison, Canada, Argentina, and the EC, which also had record crops in 1982, will show substantial increases. Australia's sharply reduced outturn will lower that country's export volume.

The Soviet Union, China, and India are the key variables in the size of this year's import market. Last year the Soviet's harvested their fourth successive poor wheat crop, continuing the USSR's reliance on foreign suppliers for about 19 million tons. Soviet purchases during the first half of the season were strong, with Canada the principal seller, followed by France, Argentina, and the United States. Purchases from the United States have now reached the minimum 3 million tons required under the seventh year of the long-term grains trade agreement. Further sales this crop year are uncertain. India's record 1982 production did not preclude entrance into the world wheat market this year, since crop quality was poor because of extensive weather damage and the rice harvest was poor. Total wheat imports are expected to be at least double last year's 2.3 million tons. Despite a record wheat harvest, China's imports from all suppliers are expected to be close to last season's purchases. Among other foreign customers, Western and Eastern Europe and Mexico are expected to reduce 1982/83 purchase levels.

1983 Foreign Winter Wheat Acreage May Rise Slightly

Most of the 1983 winter wheat crop has been sown under favorable conditions, although some planting delays were noted. In Western Europe, wheat lands are likely to be expanded, though more slowly than in past years, possibly because of a smaller gain in the wheat intervention price. Dryness and some seed shortages reduced Eastern Europe's autumn-sown area. Unfavorable planting conditions in the Soviet Union suggest that crop area may be no larger than last season, if that large. Farmers in China have been encouraged by Government incentives and by favorable planting conditions to increase wheat seedings for the 1983 crop. The 1983 Indian wheat, currently approching harvest, has faced generally dry weather through most of its development but is targeted to be larger than 1982's record.

WHEAT BY CLASS

HRW Stocks Remain Large; 1983 Crop May Be Down

By January 1, about 550 million bushels of Hard Red Winter (HRW) had moved into disappearance channels this season—nearly 100 million bushels less than a year ago. As a result, midseason HRW supplies continue to be the largest ever. The estimated January 1 stocks of 1.25 billion bushels imply that nearly all of the record 1.26-billion 1982 crop remains to be marketed 7 months after it was harvested. However, because of sluggish demand and low prices, 250 million bushels of new-crop HRW went into the grain reserve and loan programs. Combining these reserve stocks with those from prior years means that 40 percent of January 1 stocks are not readily marketable.

June-December disappearance was the lowest in 5 years, entirely because export shipments are down a fourth. Current loadings of HRW to the Soviet Union, perennially the largest HRW buyer, are only a sixth of last year's pace. Shipments to some major Latin American markets have also been quite sluggish, leaving expanded purchases by India the only bright spot. Although the export pace could improve modestly in the remaining months of 1982/83, large world wheat stocks and aggressive selling by foreign suppliers will keep this year's HRW exports 50-75 million bushels below last year's record 755 million.

Acreage planted to Hard Red Winter wheat last fall for 1983 harvest was slightly smaller than 1981 seedings—4 percent less. Some of this reduction represents unfavorable planting conditions, but most of the cutback could be in response to the acreage reduction program. Central Plains States, led by Kansas, lowered plantings 1.2 million acres; the total decline for all States was estimated at 1.7 million. However, wintering conditions, judged to be relatively good, could help the 1983 crop come out of dormancy in excellent condition. Unless additional acreage goes into the expanded PIK, possibly via plowdown, grazing, or haying, 1983's HRW production could well remain above a billion bushels and again exceed use. Each additional million acres complying with the program could result in a drop of about 30 million bushels. Thus, it would require about 4 million acres in the PIK program to reduce production to approximate this year's disappearance.

Hard Red Spring Exports Up, But Stocks Still Larger

Stocks of Hard Red Spring (HRS) on January 1 totaled about 620 million bushels, nearly 110 million more than a year ago. This increase reflects the sizable carryover of old-crop stocks plus the record 1982 production of 500 million bushels. About half of this inventory was in the grain reserve.

Though competition from a bumper 1982 Canadian wheat crop has been strong, the U.S. HRS export pace at midseason was up nearly 10 percent. HRS exports are the only class expected to be higher in 1982/83 than the year before. Although Western Europe, which is usually the largest purchaser, has cut back, expanded sales to Japan, the Philippines, Nigeria, and Chile more than make up the difference. A portion of this HRS surge may be due to some shifting away from HRW because of concern for its quality.

Despite the increased export demand, large supplies dominate the market, causing midseason Minneapolis cash prices to be about equal to or below Kansas City HRW. Minneapolis prices normally carry a premium over other markets. Prices in the coming months will depend upon farmers' further reserve loan activity, 1983 planting developments, and indications of response to the entire acreage reduction effort. In spring wheat areas, participation is expected to be strong in both the regular ARP and PIK program, reducing supply for 1983/84. However, HRS beginning stocks for next season will be so large that typical export and domestic needs could be met with almost no production in 1983.

Durum Stocks Build; Exports Down Sharply

Durum stocks on January 1 totaled 189 million bushels, one-fourth more than last January. Producers have kept 82 percent of these Durum stocks at farm locations, with over 70 million bushels stored as part of the grain reserve program. This large midseason supply will continue to pressure prices, and yearend stocks are likely to be at a record 142 million bushels, about the same as 1982's total production.

The main reason for the current stocks situation has been foreign buyers' low interest in U.S. Durum. As of mid-January, total commitments were nearly 40 percent behind last season's, and shipments were down 20 million bushels. Expanded foreign Durum production, including a record crop in Canada, and the return of Greece as a wheat exporter suggest that total 1982/83 U.S. exports will be off nearly 20 to 25 million bushels. Last season's shipments were a near-record 82 million. This year's Durum prices have remained fairly steady at around $4.00 a bushel at Minneapolis, although they remain 50-60 cents below a year ago. In months ahead, despite the sizable supply hanging over the market, prices will tend to hold steady or strengthen somewhat if export activity recovers.

Growers are expected to react to the weak prices by participating heavily in the 1983 ARP and PIK. If the record-high 1982 yields are not repeated, the 1983 Durum crop could decrease significantly, reducing stocks in 1983/84.

Soft Red Exports Decline; 1983 Crop May Be Cut

The decline of Soft Red Winter (SRW) export activity during the first half of the 1982/83 season resulted in stocks of 235 million bushels on January 1. These large supplies have kept farm and market prices far below the $3.55-a-bushel loan level since harvest of the near-record 1982 crop. Early-season farm prices were reported to be below $3.00 a bushel in some areas. Low SRW participation in the 1982 acreage reduction program limited the quantity that could be isolated into the reserve program, which otherwise might have helped support prices. In addition, even though bargain SRW dockside prices have stimulated brisk export buying in the past, traditional large customers drastically curbed purchases. Current sales and shipments to China, the largest buyer, are down a third from last season, and exports to Eastern Europe are almost nonexistent. Total 1982/83 SRW exports are projected to be down nearly a fifth from last season, mostly because of the expansion of world soft wheat production and the continuing emphasis by the EC—the major U.S. soft wheat competitor—on exporting surplus stocks.

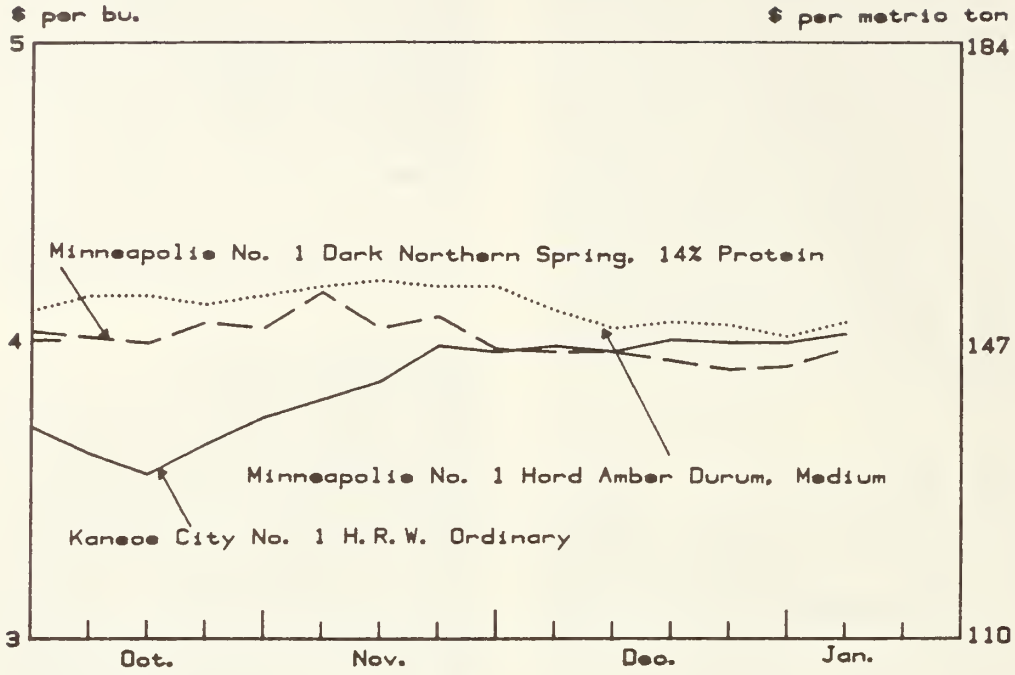
Low prices, wet fall planting weather and, possibly, participation in the 1983 ARP contributed to a decrease of about 1.7 million acres in the area seeded to the 1983 SRW crop. This is the smallest area in 3 years and the first planting reduction since 1978. In addition, harvested acreage may be further reduced because of winter flood damage in some southern areas and some small enrollment in the PIK program. Thus, total 1983 SRW production will likely be below the banner 1981 and 1982 crops of over 600 million bushels.

White Wheat Exports Slow; Stocks Remain High

White wheat stocks as of January 1 totaled nearly 230 million bushels, about equal to a year ago. Close to half of these midseason stocks are held in the grain reserve or owned by CCC. Although a reduced 1982 crop noticeably lowered 1982/83's beginning supplies, June-December disappearance declined correspondingly, because of lower exports.

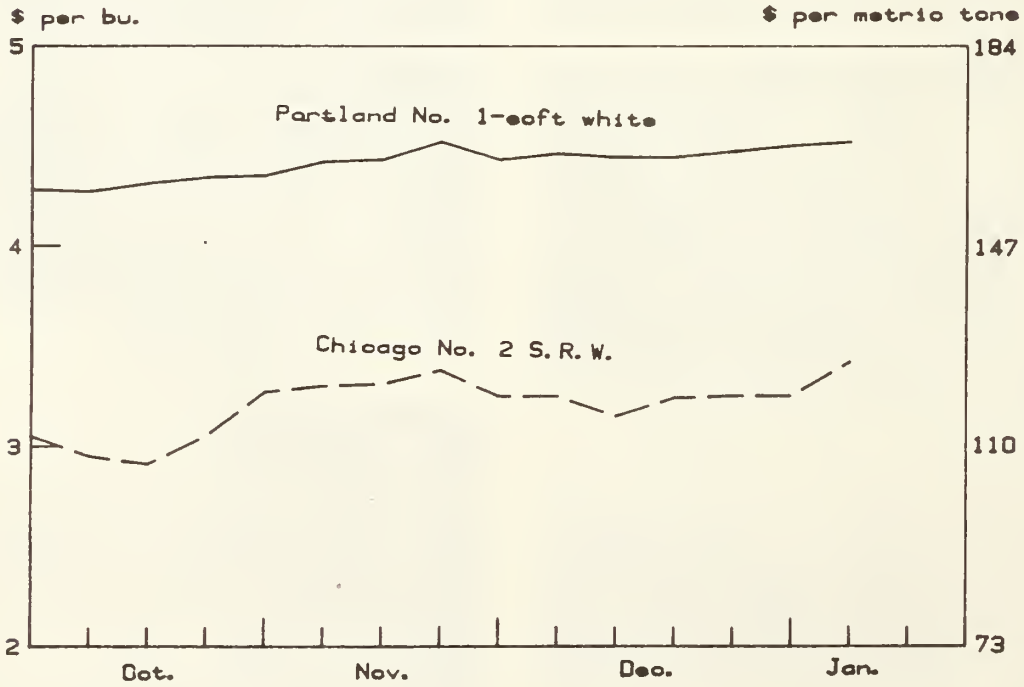
Because White wheat export prices currently carry a substantial premium over prices of the main competitor, Soft Red, some foreign purchasers switched to other sources or other classes. More than halfway through the marketing year, export commitments were 17 percent behind a year earlier. India, often preferring Soft White when buying on the U.S. market, shifted a larger share of its purchases to more attractively priced HRW.

Cash Wheat Prices, 1982/83 *



* Thursday price.

Cash Wheat Prices, 1982/83*



* Thursday price.

White wheat prices have strengthened steadily; farm prices over $4 a bushel have been common since the harvest. The reduced crop, heavy participation in the reserve program, and a strong export outlook caused concern for dwindling free supplies, which helped create the bullish market. However, current projections of a record yearend carryover will tend to limit further price advances.

Last fall, western White producers marginally reduced the area seeded to the 1983 crop from that in 1982, while eastern producers increased their area. In 1982, reduced plantings were largely due to participation in the 15-percent acreage reduction program. In 1983, these same complying producers will have to allow another 5 percent of their base to remain idle to qualify and at least 10 percent more if they agree to enter the PIK program. To meet these requirements some growers may have to plow down a growing crop. Stronger White Wheat grower participation in the 1983 crop programs is needed to offset the projected record carryover of supplies into 1983/84.

Rye: Supply and disappearance

Item	June-December	
	1981/82	1982/83
	Million bushels	
June 1 stocks	4.1	3.1
Production	18.8	20.8
Total supply 1/	23.0	25.8
Exports	1.4	0.1
Food	2.0	2.0
Seed	4.0	4.0
Industrial	1.0	1.2
Feed	6.7	7.6
Total disappearance	15.1	14.9
January 1 stocks	7.9	10.9

1/ Includes imports.

1983 Rye Production May Expand

Last fall, growers seeded 2.67 million acres of rye for all purposes. Though plantings are only 2 percent above 1981, production prospects for 1983 may be significantly affected by the fact that planted acreage in major rye-producing States in the North Central area (Minnesota, North Dakota, and South Dakota) is up 40 percent. These States normally harvest about 85 percent of their rye area for grain, compared with less than 20 percent for most other regions, where the rye plant is often consumed as livestock forage. North Central stands were good to excellent before going into winter dormancy, suggesting that the 1983 rye crop could exceed last year's 20.8-million-bushel harvest.

ANALYSIS OF THE 1983 WHEAT PROGRAM

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ABSTRACT: This article examines factors affecting participation in the 1983 acreage reduction, cash diversion, and payment-in-kind programs for wheat. Net returns are computed for sample spring and winter wheat farms under different participation options. For spring wheat sold at loan-rate prices, net returns are highest when 30 percent of the farm's base is diverted for payment in kind. Participation in only the acreage reduction and cash land diversion program gives the next highest return, and nonparticipation the lowest. For winter wheat, returns are highest in the acreage reduction and cash diversion program. However, if a producer can take advantage of haying and grazing, participation in PIK would give the highest returns. Analyses of returns for both spring and winter wheat growers suggest participation in 1983 will likely approach the maximum for spring wheat and should exceed 1982's level for winter wheat.

KEYWORDS: Wheat, acreage reduction, cash diversion, payment-in-kind (PIK), participation.

Wheat producers harvested the biggest crop ever in 1982, 2.8 billion bushels. Export prospects have diminished in recent months, dropping the forecast of total use to less than 2.5 billion bushels. Stocks could reach 1.5 billion bushels by June 1, 1983—about 50 percent above only 2 years earlier. In spite of a 15-percent acreage reduction and 5-percent paid diversion program, there was little prospect in late 1982 for a reduction in stocks during 1983/84. This led to the announcement of the 10- to 30-percent payment-in-kind (PIK) program, which is designed to turn 1983/84 into a year of transition to lower carryover stocks.

Program Example

Details of the wheat program are presented elsewhere in this situation report. Examples are developed here to illustrate how the provisions may be assessed by winter and spring wheat farmers formulating a planting strategy. Basic assumptions for example tables 1 and 2 include the following:

- The example farms have 100 acres of wheat base. Three planting options are considered: (1) nonparticipation—the whole base is planted and harvested; (2) a 15/5 participation option where 80 acres are planted—the maximum permitted—while 15 acres are idled under the acreage reduction program and 5 acres are idled under the cash diversion program; and (3) a 15/5/30 participation option where 50 acres are planted, 30 acres—the maximum—are idled under the PIK program, and 20 acres are idled under the 15/5 program.
- Yields per harvested acre increase as more acreage is idled, because producers choose their more marginal acreage to idle.
- Program payment yields are established by USDA at 29 and 34 bushels per acre for the spring and winter wheat producer, respectively.
- The average selling price is $3.65 a bushel—the national average loan rate. This price is also assumed to be the average farm price during the first 5 months of 1983/84, thus triggering a deficiency payment rate of $.65 a bushel (the $4.30 a bushel target price minus $3.65).
- Variable production costs are $60 per acre for spring wheat. For winter wheat, the primary variable costs remaining are harvesting costs, which are assumed to be $15 an acre.
- The cost for meeting approved disposal and/or cover on the conservation use acreage is assumed to be $20 an acre for spring wheat and $5 an acre for winter wheat (the stubble is assumed to be approved cover).
- No cash value is considered for the haying and grazing privilege for winter wheat. For many farmers, this will be a very important factor. Haying and grazing may be worth $20 to $30 an acre. If $25 per idled acre is added to the winter wheat participant's returns, net returns under the 15/5/30 option become the largest. Also, the 15/5 option becomes even more attractive than nonparticipation.

Spring Wheat

The decision whether to participate in the program requires the spring wheat farmer to weigh the potential program benefits against the net revenue that is forgone by taking land out of production. Excluding the added complications introduced by considering alternative crops, evaluating the various amounts of land that may be withdrawn from production when participating at different levels makes the farmer's decision quite complex.

The participating farm may receive cash income from up to 4 sources: (1) market receipts on production, (2) deficiency payments, (3) cash diversion payments,

and (4) market receipts from the sale of PIK bushels. Relevant costs are variable production costs and cover-crop costs. Fixed costs are the same under any planting alternative, so they need not be considered.

Table 1 shows that the nonparticipant, who must rely solely on market receipts, nets $4,220 above variable costs. Returns jump to $5,168 when the participant complies with the 15/5 program, and rise to $6,010 when the participant offers 30 percent of the base for PIK. Clearly, for this farm and the assumed market price, participation in PIK is a very desirable option. The whole base option is not considered in table 1. However, if a bid for a PIK offer rate of 90 percent of program yield is assumed to be accepted, net returns with the whole base idled work out to be $7,442 (receipts from 95 PIK acres plus 5 diverted acres minus cover costs)—even more desirable than 15/5/30.

What happens to the participation incentive as the expected market price falls or rises? For prices below $3.65 a bushel, the participation incentive increases further because the participant is assumed to use the loan as a price floor to ensure price protection on program production while the nonparticipant cannot. The difference between the 15/5 and the 15/5/30 net returns, however, narrows slightly because the PIK bushels are not eligible for price support and are marketed at the $3.45 price. Reworking table 1 using alternative prices illustrates this point.

Table 1—Spring wheat returns on 100 acres of wheat base[1]

Item	Nonparticipant	Participant[2] 15/5	Participant[2] 15/5/30
INCOME			
1. Acres harvested	100	80	50
2. Yield per acre (bu)	x 28	x 29	x 31
3. Production (bu)	2,800	2,320	1,550
4. Average price ($/bu)	x 3.65	x 3.65	x 3.65
5. Market receipts ($)	10,220	8,468	5,658
6. Payment yield (bu)		29	29
7. Acres harvested		x 80	x 50
8. Program prod. (bu)		2,320	1,450
9. Deficiency payment rate ($/bu)		x .65	x .65
10. Deficiency payments ($/bu)		1,508	943
11. Payment yield (bu)		29	29
12. Acres diverted		x 5	x 5
13. Diverted production (bu)		145	145
14. Diversion payment rate ($/bu)		x 2.70	x 2.70
15. Diversion payments ($)		392	392
16. PIK offer rate (.95 x 29 bu)			27.55
17. PIK acres			x 30
18. PIK (bu)			827
19. Average price ($/bu)			x 3.65
20. Value of PIK ($)			3,017
21. Gross income (5+10+15+20, $)	10,220	10,368	10,010
EXPENSES			
22. Acres harvested	100	80	50
23. Variable costs ($/a.)	x 60	x 60	x 60
24. Total ($)	6,000	4,800	3,000
25. Conservation use acres		20	50
26. Cover costs ($/a.)		x 20	x 20
27. Total conservation costs ($)		400	1,000
28. Total variable costs (24+27, $)	6,000	5,200	4,000
NET RETURN			
29. Income less variable costs (21 minus 28, $)	4,220	5,168	6,010

[1] Numbers are rounded to nearest whole dollar. [2] The 15/5 is the 15-percent acreage reduction and 5-percent cash diversion programs. The 15/5/30 is 15/5 plus 30 percent of base in payment-in-kind program.

Average price	Net returns: Nonparticipant	Participant 15/5	Participant 15/5/30
Dollars/bu	*Dollars*		
3.45	3,660	5,168	5,843
3.65	4,220	5,168	6,010
3.85	4,780	5,168	6,195
4.05	5,340	5,168	6,380
4.25	5,900	5,168	6,566

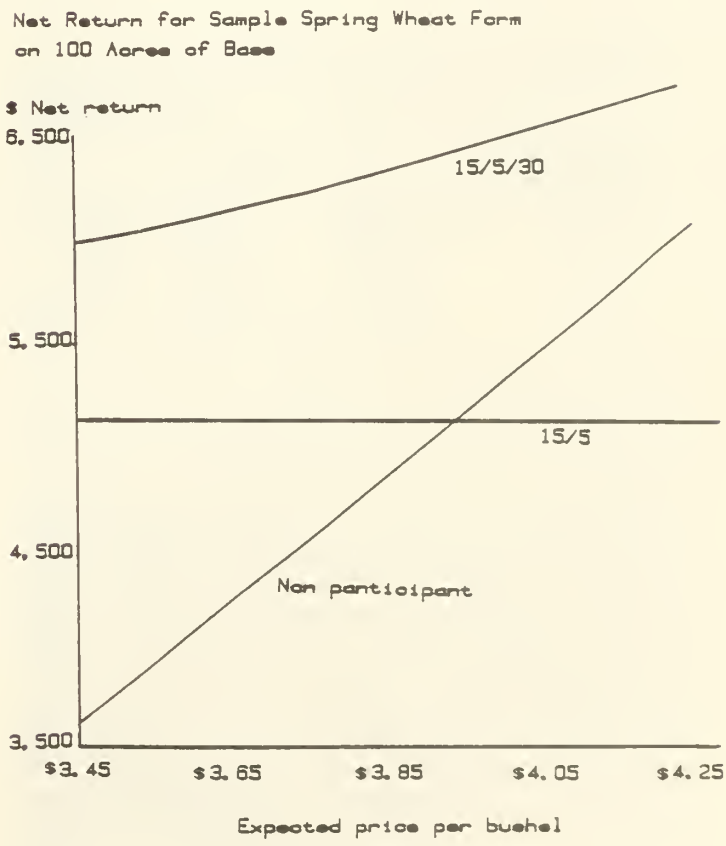


Figure 1.

For prices above $3.65 a bushel, the nonparticipant's returns rise while the 15/5 returns remain stable. The 15/5 returns do not change because harvest and program yields are the same, so rising market receipts exactly offset falling deficiency payments. The 15/5/30 returns grow, but more slowly than the nonparticipant's, also because of falling deficiency payments (see figure 1). At a price of about $4.00 a bushel, returns from nonparticipation equal those from the 15/5 option. Thus, at prices above $4.00 a bushel, either nonparticipation or 15/5/30 would be the preferred option. Not until the price reaches about $5.65 a bushel do the returns from nonparticipation equal those from the 15/5/30 option. To the extent that the example farm represents spring wheat producers, it suggests high participation in the PIK program, because farmers expecting prices in the $5.00 range are probably not very numerous.

Winter Wheat

Returns above variable costs for the winter wheat options are shown in table 2, and they indicate different participation incentives than for spring wheat. The lower variable costs make the savings on input expenditures from idling land much lower, thus reducing net returns under participation relative to nonparticipation. For the example farm, the 15/5 option has the highest net return, followed closely by nonparticipation, then by the 15/5/30 option. Assuming a PIK payoff rate of .95 for an accepted whole base bid, net returns under the whole base option would be $11,159, placing them between the returns for nonparticipation and the 15/5 option.

Returns above variable costs for alternative market prices are indicated in the following table:

Average price	Net returns		
	Nonparticipant	Participant	
		15/5	15/5/30
Dollars/bu	*Dollars*		
3.35	10,225	11,439	10,562
3.45	10,575	11,439	10,660
3.65	11,275	11,439	10,854
3.85	11,975	11,471	11,082
4.05	12,675	11,503	11,301

While returns for spring wheat under 15/5 did not rise, they do for winter wheat because program yield is slightly lower than harvest yield. Returns from nonparticipation equal those from the 15/5 option at a price of $3.70 a bushel. Returns from nonparticipation equal those from the 15/5/30 option at $3.48 a bushel. To the extent that the example farm represents winter wheat producers, it suggests there is an incentive for producers to participate in the 15/5 option, because there will likely be many producers who expect prices near the loan rate, or even below. Although the incentive to participate in the 15/5/30 option is slightly weaker, suggesting lower participation, prices below loan rates this spring would make this option very attractive for many farmers.

Table 2—Winter wheat returns on 100 acres of wheat base[1]

Item	Nonparticipant	Participant[2] 15/5	Participant[2] 15/5/30
INCOME			
1. Acres harvested	100	80	50
2. Yield per acre (bu)	x 35	x 36	x 37
3. Production (bu)	3,500	2,880	1,850
4. Average price ($/bu)	x 3.65	x 3.65	x 3.65
5. Market receipts ($)	12,775	10,512	6,753
6. Payment yield (bu)		34	34
7. Acres harvested		x 80	x 50
8. Program production (bu)		2,720	1,700
9. Deficiency payment rate ($/bu)		x .65	x .65
10. Deficiency payments ($/bu)		1,768	1,105
11. Payment yield (bu)		34	34
12. Acres diverted		x 5	x 5
13. Diverted production (bu)		170	170
14. Diversion payment rate ($/bu)		x 2.70	x 2.70
15. Diversion payments ($)		459	459
16. PIK offer rate (.95 x 34 bu)			32.3
17. PIK acres			x 30
18. PIK (bu)			969
19. Average price ($/bu)			x 3.65
20. Value of PIK ($)			3,537
21. Gross income (5+10+15+20, $)	12,775	12,739	11,854
EXPENSES			
22. Acres harvested	100	80	50
23. Variable costs ($/a.)	x 15	x 15	x 15
24. Total ($)	1,500	1,200	750
25. Conservation use acres		20	50
26. Cover costs ($/a.)		x 5	x 5
27. Total conservation costs ($)		100	250
28. Total variable costs (24+27, $)	1,500	1,300	1,000
NET RETURN			
29. Income less variable costs (21 minus 28, $)	11,275	11,439	[3]10,854

[1] Numbers are rounded to nearest whole dollar. [2] The 15/5 is the 15-percent acreage reduction and 5-percent cash diversion programs. The 15/5/30 is 15/5 plus 30 percent of base acreage in payment-in-kind program. [3] This return does not include possible returns that could be realized by grazing or haying the 30 PIK acres.

Incentives and Actual Participation

A method for forecasting program participation under any type of supply adjustment program is to construct an index of the participation incentive at planting time for programs in prior years and compare it with final program compliance. If a relationship can be established, participation for 1983 may then be estimated using the relationship and the 1983 incentives.

As a simple example, consider the 1982 wheat program. Derived from the procedure above, a price that equalized net returns from nonparticipation with those from participation in 1982's program was $3.76 a bushel for a sample spring wheat farm and $3.66 for a sample winter wheat farm. This analysis was published in the USDA's Farmer's Newsletter, Wheat, W-21, February 1982.

The 1981/82 season-average U.S. farm price was $3.65 a bushel, and the 1982-crop loan rate was $3.55. Assume the sample farmer expected a national average price of $3.60 a bushel. A participation-incentive index is the ratio of the equalizing price to the expected market price multiplied by 100. A value of 100 for the index indicates the equalizing and expected prices are the same, and the producer is indifferent about participating or not participating. The higher the ratio, the stronger the incentive to participate, because it implies larger net returns under participation relative to those under nonparticipation. So, for the sample farm in 1982, the spring wheat participation index was 104.4 ($3.76 divided by $3.60 multiplied by 100), and the winter wheat index was 101.7.

Program participation is defined as the percentage that complying base acreage is of total base acreage. State data indicate 1982 spring wheat participation was about 70 percent; winter wheat, 38 percent; and all wheat, 48 percent.

A hypothetical relationship between the participation-incentive index and participation is shown in figure 2. It is drawn to pass through the 50 percent participation point when the index has a value of 100. This assumes an index of 100 represents the mean of the distribution of individual farm indexes. The relationship becomes steeper as the incentive rises and 100 percent participation is approached. Maximum participation is below 100 percent, reflecting such factors as the limit on program payments an individual can receive, philosophical aversion to Government programs by some farmers, and the cost of obtaining information.

The participation-incentive indexes for the 1983 programs, based on the computed equalizing prices and an expected price of $3.65 a bushel, are plotted to fall on the hypothetical curve. The data for 1982 spring wheat happen to fall on the curve, but that for 1982 winter wheat lies to the left. This implies that the actual curve could be to the left of the hypothetical curve, or the index for 1982 winter wheat producers is overestimated. The latter seems likely for several reasons. Winter wheat producers had to make their compliance decision ahead of spring wheat producers, and so many may have expected a price higher than $3.65 a bushel. Average winter wheat yields were higher than those used in the calculations, and this probably reduced the incentive to plow down. Finally, winter wheat producers did not know the program details when they planted, so many planted in excess of their base acreage. For them, areas much larger than 15 percent of base acreage would require destruction in order to comply, and the opportunity cost was likely too great.

Figure 2 indicates that program participation in 1983 will likely approach the maximum for spring wheat and

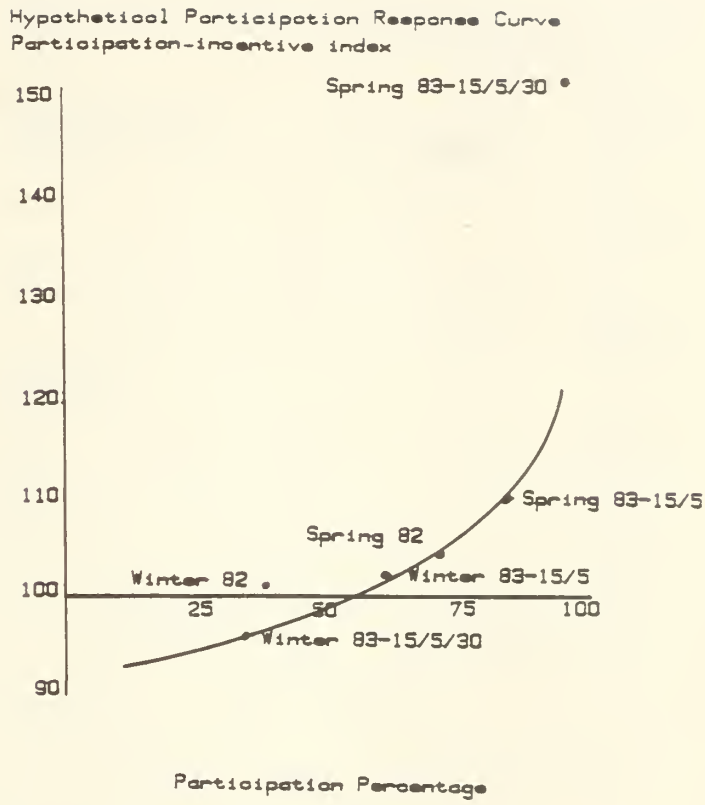


Figure 2

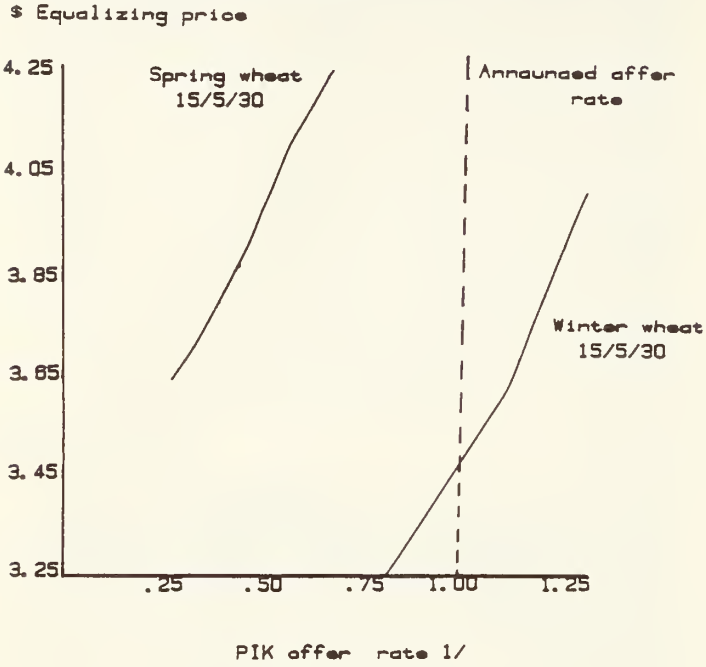
should exceed the 1982 level for winter wheat. These conclusions are based only on the financial factors considered in tables 1 and 2. There are additional incentives to participate as indicated in the last section of this article. If spring wheat producers were to comply at a 85- to 95-percent rate and winter wheat producers at a 50- to 60-percent rate, overall participation would be about 60 to 70 percent.

Equalizing Price and PIK Offer Rate

The equalizing price sets net returns from program participation equal to those from nonparticipation and can be found algebraically by equating a mathematical statement of net returns under each option and solving for price. Three formulas can be derived, depending on whether the market price that equates returns is below the loan rate, between the loan rate and target price, or above the target price.

The formulas can be used to examine the tradeoff between the equalizing price and the PIK offer rate. As indicated earlier, the higher the equalizing price is relative to the expected price, the greater the participation incentive. Policymakers would like to design program provisions that imply a higher equalizing price while simultaneously limiting federal budget exposure. The PIK offer rate is a policy instrument that may be varied to achieve different equalizing prices. The equalizing price formulas show the relationship between the equalizing price and the offer rate.

Relationship Between Equalizing Price and PIK Offer Rate for Sample Farms



1/ Portion of program payment yield.

Figure 3

Figure 3 shows the tradeoff between the equalizing price and the PIK offer rate under the 15/5/30 option when the equalizing price is between the loan rate and the target price and, for winter wheat, when it is below the loan rate. A given equalizing price can be obtained with widely different offer rates for winter wheat and spring wheat.

The figure implies a number of interesting conclusions. It suggests high participation incentives for spring wheat with an offer rate in the range of 70 to 95 percent of program yield. From this, it is reasonable to expect that many whole base bids for spring wheat could be well below the announced offer rate. For winter wheat, a high equalizing price would likely require an offer rate above 100 percent of program yield, so many whole base bids are likely to be close to the announced offer rate. This figure is based only on the data presented earlier for the sample farms. Many factors could shift these curves. For example, spring wheat growers who have already fertilized—as in many many regions—would have lower variable costs. This would shift the spring wheat curve right.

The same offer rate was announced for winter and spring wheat in order to obtain efficiencies in program operation. Figure 3 indicates the difficult decision wheat policymakers had to make when selecting a single offer rate that encouraged participation, retired the most acreage for the least quantity of PIK, and was equitable to producers facing a wide range of production situations.

Other Important Factors

The above analysis focuses primarily on the participation incentives provided by program payments. There are numerous other factors that make participation attractive. The program reduces the risk of a low net return. The deficiency payment, diversion payment, and payment-in-kind are not affected by actual yield, so these provisions provide insurance against crop failure. However, higher price risk is substituted in place of lower production risk because PIK wheat is not eligible for price support. The regular loan is a participation incentive because it provides price protection for what is produced. The farmer-owned reserve loan provides an additional marketing option. The Federal Crop Insurance Corporation provides higher yield coverage for PIK participants and lower premiums. Haying and grazing of winter wheat will be important to many farmers. Production loans with their high interest rates can be avoided. Fewer planted acres mean more time to manage the farm, reduce wear and tear on machinery, and undertake new tasks that were not getting done. On balance, the 1983 wheat program has many facets that could sharply boost participation.

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Table 2--Wheat classes: Marketing year supply and disappearance 1/

Year beginning June 1	Supply			Disappearance			Ending stocks May 31
	Beginning stocks	Production	Total 2/	Domestic use	Exports	Total	
	Million bushels						
1979/80:							
Hard Winter	423	1,089	1,512	347	725	1,072	440
Hard Spring	320	363	684	182	217	399	285
Soft Red	27	317	344	150	154	304	40
White	68	259	327	55	196	251	76
Durum	86	106	193	49	83	132	61
All classes	924	2,134	3,060	783	1,375	2,158	902
1980/81:							
Hard Winter	440	1,181	1,621	379	701	1,080	541
Hard Spring	285	312	598	153	188	341	257
Soft Red	40	435	475	138	299	437	38
White	76	338	414	54	267	321	93
Durum	61	108	171	52	59	111	60
All classes	902	2,374	3,279	776	1,514	2,290	989
1981/82:							
Hard Winter	541	1,117	1,658	364	755	1,119	539
Hard Spring	257	468	726	172	206	378	348
Soft Red	38	676	714	194	460	654	60
White	93	352	445	66	270	336	109
Durum	60	186	248	58	82	140	108
All classes	989	2,799	3,791	854	1,773	2,627	1,164
1982/83: 3/							
Hard Winter	539	1,255	1,794	370	705	1,075	719
Hard Spring	348	500	850	172	240	412	438
Soft Red	60	610	670	226	390	616	54
White	109	296	405	56	200	256	149
Durum	108	148	258	51	65	116	142
All classes	1,164	2,809	3,977	875	1,600	2,475	1,502

1/Data, except production, are approximations. Imports and exports include flour and products in wheat equivalent.
2/Total supply includes imports.
3/Projected.

Table 3--Wheat: Marketing year supply and disappearance, specified periods 1979-82*

Year and period	Supply				Ending stocks		
	Beginning stocks	Production	Imports 1/	Total	Gov't owned	Privately owned 2/	Total
	- - -Million bushels- - -						
1979/80							
June-Sept.	924.1	2,134.1	0.7	3,058.9	49.9	2,220.9	2,270.8
Oct.-Dec.	2,270.8	---	0.5	2,271.3	49.6	1,666.6	1,716.2
Jan.-Mar.	1,716.2	---	0.5	1,716.7	63.3	1,161.8	1,225.1
Apr.-May	1,225.1	---	0.4	1,225.5	141.7	760.3	902.0
Mkt. year	924.1	2,134.1	2.1	3,060.3	141.7	760.3	902.0
1980/81							
June-Sept.	902.0	2,374.3	0.8	3,277.1	202.1	2,270.2	2,472.3
Oct.-Dec.	2,472.3	---	0.6	2,472.9	203.5	1,699.7	1,903.2
Jan.-Mar.	1,903.2	---	0.7	1,903.9	203.2	1,125.4	1,328.6
Apr.-May	1,328.6	---	0.4	1,329.1	199.7	789.1	988.8
Mkt. year	902.0	2,374.3	2.5	3,278.8	199.7	789.1	988.8
1981/82							
June-Sept.	988.8	2,798.7	0.7	3,788.2	191.3	2,543.9	2,735.2
Oct.-Dec.	2,735.2	---	0.8	2,736.0	188.7	1,989.3	2,178.0
Jan.-Mar.	2,178.0	---	0.8	2,178.8	189.1	1,368.0	1,557.1
Apr.-May	1,557.1	---	0.5	1,557.6	190.3	973.6	1,163.9
Mkt. year	988.8	2,798.7	2.8	3,790.3	190.3	973.6	1,163.9
1982/83 4/							
June-Sept.	1,163.9	2,808.7	1.2	3,973.8	190.6	2,796.5	2,987.1
Oct.-Dec.	2,987.1	---	3.0	2,990.1	179.0	2,342.4	2,521.4
Jan.-Mar.	2,521.4						
Apr.-May							
Mkt. year							

Year and period	Disappearance					
	Domestic use					
	Food	Seed	Feed 3/	Total	Exports 1/	Total disappearance
	- - -Million bushels- - -					
1979/80						
June-Sept.	198.5	33.0	45.6	277.1	511.0	788.1
Oct.-Dec.	157.9	37.0	-27.7	167.2	387.9	555.1
Jan.-Mar.	145.1	1.0	62.8	208.9	282.7	491.6
Apr.-May	94.6	30.0	5.3	129.9	193.6	323.5
Mkt. year	596.1	101.0	86.0	783.1	1,375.2	2,158.3
1980/81						
June-Sept.	197.2	38.0	51.2	286.4	518.4	804.8
Oct.-Dec.	167.1	44.0	-12.8	198.3	371.4	569.7
Jan.-Mar.	150.1	1.0	23.7	174.8	400.4	575.2
Apr.-May	96.1	31.0	-10.4	116.7	223.6	340.3
Mkt. year	610.5	114.0	51.7	776.2	1,513.8	2,290.0
1981/82						
June-Sept.	202.5	37.0	191.7	431.2	621.8	1,053.0
Oct.-Dec.	158.6	46.0	-74.3	130.3	427.7	558.0
Jan.-Mar.	151.7	1.0	28.0	180.7	441.0	621.7
Apr.-May	87.3	28.0	-4.0	111.3	282.4	393.7
Mkt. year	600.1	112.0	141.4	853.5	1,772.9	2,626.4
1982/83 4/						
June-Sept.	206.4	37.0	197.6	441.0	545.7	986.7
Oct.-Dec.	150.0	41.0	-37.7	153.3	315.4	468.7
Jan.-Mar.						
Apr.-May						
Mkt. year						

1/ Imports and exports include flour and other products expressed in wheat equivalent. 2/ Includes outstanding and reserve loans. 3/ Residual; approximates feed use and includes negligible quantities used for alcoholic beverages. 4/ Preliminary.
* Totals may not add due to rounding.

Table 4--Wheat, flour and wheat products, United States exports by months, 1980-82*

Year and Month	Wheat	Flour 1/ (Grain equivalent)	Products 2/ (Grain equivalent)	Monthly total	Accumulative total
			1,000 bushels		
1980/81					
June	96,193	4,230	912	101,335	101,335
July	123,598	2,082	1,222	126,902	228,237
August	141,415	5,057	711	147,183	375,420
September	137,325	3,774	1,849	142,949	518,369
October	116,948	2,785	1,284	121,017	639,386
November	112,199	2,165	1,005	115,369	754,755
December	132,048	1,739	1,230	135,017	889,772
January	129,981	2,658	890	133,529	1,023,301
February	124,397	5,217	1,010	130,624	1,153,925
March	128,770	6,353	1,114	136,238	1,290,163
April	127,652	7,347	4,433	139,432	1,429,596
May	78,030	4,803	1,406	84,239	1,513,835
Mkt. year	1,448,558	48,209	17,068	1,513,835	
1981/82					
June	124,521	5,794	1,827	132,142	132,142
July	138,168	2,779	1,150	142,097	274,239
August	145,428	3,455	1,009	149,892	424,131
September	194,148	2,496	1,037	197,681	621,812
October	156,993	868	1,171	159,032	780,844
November	127,495	511	1,407	129,413	910,257
December	137,757	935	572	139,264	1,049,520
January	124,163	1,767	1,211	127,141	1,176,661
February	138,719	8,068	1,875	148,662	1,325,323
March	159,078	5,775	351	165,204	1,490,527
April	148,181	8,838	2,246	159,265	1,649,792
May	116,496	5,983	692	123,171	1,772,963
Mkt. year	1,711,147	47,269	14,547	1,772,963	
1982/83					
June	156,914	4,587	971	162,472	162,472
July	117,914	1,393	476	119,783	282,255
August	124,336	3,499	1,073	128,908	411,164
September	130,992	2,527	984	134,503	545,667
October	98,520	3,909	2,714	105,143	650,810
November	94,638	8,120	6,923	109,680	760,490
December	88,457	8,179	3,909	100,545	861,035
January					
February					
March					
April					
May					
Mkt. year					

1/ Includes meal and groats. 2/ Includes macaroni and bulgar.

* Totals may not add due to rounding.

Source: Bureau of the Census.

Table 5--Wheat: Price support loan status on specified dates, 1976-82 crops

Crop of	Total loans	Put in reserve	Repaid Loans	Repaid Reserve	Delivered to CCC	Outstanding Loans	Outstanding Reserve
			Million bushels				
			As of June 1, 1982				
1976	498.8	216.1	234.7	158.3	48.0	--	57.8
1977	590.8	195.0	393.6	140.0	2.2	--	55.0
1978	255.1	24.1	231.0	4.5	--	--	19.6
1979	180.5	40.0	140.5	5.7	--	--	34.3
1980	329.4	206.1	123.0	3.2	--	0.3	202.9
1981	445.8	191.1	141.7	0.3	1.3	111.7	190.8
Total	***	***	***	***	1/190.3	112.0	560.4
			As of October 1, 1982				
1976	498.8	216.1	234.7	158.7	48.0	--	57.4
1977	590.8	195.0	393.6	140.2	2.2	--	54.8
1978	255.1	24.1	231.0	4.5	--	--	19.6
1979	180.5	40.0	140.5	5.8	--	--	34.2
1980	329.4	206.2	123.0	3.6	--	0.2	202.6
1981	445.8	217.6	175.0	0.6	7.3	45.9	217.0
1982	335.2	283.4	0.8	---	--	51.0	283.4
Total	***	***	***	***	1/190.6	97.1	869.0
			As of January 1, 1983				
1976	498.8	216.1	234.7	159.7	48.0	--	56.4
1977	590.8	195.0	393.6	140.3	2.2	--	54.7
1978	255.1	24.0	231.1	4.7	--	--	19.3
1979	180.5	40.0	140.5	5.9	--	--	34.1
1980	329.4	206.2	123.0	3.8	--	0.2	202.4
1981	445.8	229.4	177.2	0.6	10.9	28.3	228.8
1982	501.1	422.4	4.5	0.3	--	74.2	422.1
Total	***	***	***	***	1/179.0	102.7	1,017.8
			As of April 1, 1982				
1976	498.8	216.1	234.7	158.1	48.0	--	58.0
1977	590.8	195.0	393.6	139.8	2.2	--	55.2
1978	255.1	24.1	231.0	4.5	--	--	19.6
1979	180.5	40.0	140.5	5.7	--	--	34.3
1980	329.4	206.0	122.6	3.0	--	0.8	203.0
1981	427.4	164.7	101.2	0.2	0.2	161.3	164.5
Total	***	***	***	***	1/189.1	162.1	534.6

1/Includes outstanding CCC-owned stocks from loan forfeitures and open market purchases in March 1980.

Source: Agricultural Stabilization and Conservation Service loan activity reports.

Table 6--White pan bread: Estimated price and marketing spreads of ingredients per 1 pound loaf and per cwt of flour, July-Sept. 1981-1982*

Item 1/	July-Sept. 1981		July-Sept. 1982	
	Value per loaf	Value per cwt of flour	Value per loaf	Value per cwt of flour
	Cents	Dollars	Cents	Dollars
Retail price (BLS)	52.13	83.82	53.47	85.97
Price spreads				
Wholesale-to-retail 2/	9.26	14.89	9.18	14.76
Baking 3/	33.08	53.19	34.98	56.24
Flour milling	1.04	1.67	1.01	1.62
Other spreads				
Wheat, farm-to-flour mill	.88	1.41	.98	1.57
Other farm ingredients 4/	.89	1.43	.83	1.34
Flour, flour mill-to-baker	.61	.97	.55	.89
Nonfarm ingredients 5/	1.01	1.62	1.07	1.72
Total farm-retail price spread	46.75	75.17	48.59	78.14
Farm value of ingredients				
Wheat	4.59	7.37	4.23	6.80
Other farm ingredients	.80	1.28	.64	1.03
Total farm value	5.38	8.65	4.87	7.84
Cost of farm ingredients				
Flour				
F.o.b. bakery	7.11	11.43	6.77	10.89
F.o.b. flour mill	6.50	10.46	6.22	10.00
Wheat 6/				
F.o.b. flour mill	5.46	8.79	5.21	8.37
Farm value	4.59	7.37	4.23	6.80
Other farm ingredients:				
F.o.b. bakery	1.68	2.70	1.47	2.37
Farm value	.80	1.28	.64	1.03

	Dollars per cwt	
Prices of flour and millfeeds		
Flour f.o.b. bakery	11.43	10.89
Flour f.o.b. flour mill	10.46	10.00
Millfeeds, f.o.b. flour mill	4.47	4.01
	Dollars per bushel	
Prices of wheat		
Wheat, f.o.b. flour mill	4.43	4.18
Farm value	3.72	3.40

1/ Price spreads may not add because of independent rounding. 2/ Difference between retail and wholesale price of bread. 3/ Difference between wholesale price and cost of bread ingredients, f.o.b. bakery. 4/ Includes processing, transportation, and merchandising for lard, soybean oil, HFCS, corn syrup, and soy-whey blend. Difference between estimated cost to baker and estimated farm value. 5/ Estimated cost to baker of yeast, yeast food, salt, and other nonfarm ingredients. 6/ Price adjusted for value of millfeeds.

* Spreads are developed by L.D. Schnake (Economist) and Karen Stuart, ERS, USDA, at the U.S. Grain Marketing Research Laboratory, Manhattan, Kansas 66502, (913) 539-9141.

Table 7--Wheat and flour: Price relationships at milling centers, annual and by periods, 1978-82

Year and period	At Kansas City					At Minneapolis				
	Cost of wheat to produce 100 lb. of flour 1/	Wholesale price of				Cost of wheat to produce 100 lb. of flour 1/	Wholesale price of			
		Bakery flour per 100 lb. 2/	Byprod-ucts obtained 100 lb. flour 3/	Total products			Bakery flour per 100 lb. 2/	Byprod-ucts obtained 100 lb. flour 3/	Total products	
				Actual	Over cost of wheat				Actual	Over cost of wheat
	Dollars									
1978/79										
June-Sept.	7.29	7.49	1.27	8.76	1.47	7.27	8.03	1.16	9.19	1.92
Oct.-Dec.	7.83	7.77	1.67	9.44	1.61	7.78	8.15	1.48	9.63	1.85
Jan.-Mar.	7.98	7.84	1.61	9.45	1.47	7.74	8.05	1.44	9.49	1.75
Apr.-May	8.31	8.46	1.35	9.81	1.50	8.26	8.65	1.29	9.94	1.68
Mkt. year	7.85	7.89	1.47	9.36	1.51	7.76	8.22	1.34	9.56	1.80
1979/80										
June-Sept.	9.87	9.91	1.70	11.61	1.74	9.88	10.22	1.61	11.83	1.95
Oct.-Dec.	10.50	10.39	1.85	12.24	1.74	9.99	10.57	1.63	12.20	2.21
Jan.-Mar.	9.79	10.02	1.77	11.79	2.00	9.46	10.20	1.45	11.65	2.19
Apr.-May	9.24	9.75	1.50	11.25	2.01	9.61	10.04	1.36	11.40	1.79
Mkt. year	9.85	10.02	1.70	11.72	1.87	9.73	10.26	1.51	11.77	2.04
1980/81										
June-Sept.	9.81	10.11	1.81	11.92	2.11	10.46	10.83	1.63	12.46	2.00
Oct.-Dec.	10.80	10.54	2.38	12.92	2.12	11.29	11.04	2.05	13.09	1.80
Jan.-Mar.	10.31	10.44	1.95	12.39	2.08	10.98	11.05	1.67	12.72	1.74
Apr.-May	10.27	10.42	1.81	12.23	1.96	11.08	11.09	1.76	12.85	1.77
Mkt. year	10.30	10.38	1.99	12.37	2.07	10.95	11.00	1.78	12.78	1.83
1981/82										
June-Sept.	9.69	10.33	1.55	11.88	2.19	10.08	10.82	1.49	12.31	2.23
Oct.-Dec.	9.93	10.13	1.79	11.92	1.99	9.84	10.52	1.43	11.95	2.11
Jan.-Mar.	9.85	10.66	1.41	12.07	2.22	9.63	10.82	1.23	12.05	2.42
Apr.-May	9.76	10.38	1.52	11.90	2.14	9.64	10.54	1.48	12.02	2.38
Mkt. year	9.81	10.37	1.57	11.94	2.13	9.80	10.67	1.41	12.08	2.28
1982/83 4/										
June-Sept.	9.24	10.14	1.39	11.53	2.29	9.31	10.43	1.25	11.68	2.37
Oct.-Dec.	9.22	10.06	1.58	11.64	2.42	9.22	10.43	1.29	11.72	2.50
Jan.-Mar.										
Apr.-May										
Mkt. year										

1/Based on 73 percent extraction rate, cost of 2.28 bushels: At Kansas City, No. 1 Hd. Winter, 13 percent protein, and at Minneapolis, simple average of No. 1 Dark Northern Spring, 13 and 15 percent protein. 2/Quoted as 95 percent patent at Kansas City and standard patent at Minneapolis, bulk basis. 3/Assumed 50-50 millfeed distribution between bran and shorts or middlings, bulk basis. 4/Preliminary.

Source: Compiled from reports of Agricultural Marketing Service and Department of Labor.

Table 8--Wheat: Farm price for leading classes and major feed grains in region, 1979-82 1/

Commodity and year	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Simple average	Loan rate
							All prices for 60 pounds							
							Central and So. Plains (Hard Winter) 2/							
Wheat:														
1979/80	3.63	3.81	3.72	3.82	3.86	3.93	3.89	3.81	3.73	3.51	3.36	3.48	3.71	2.43
1980/81	3.49	3.63	3.75	3.86	4.10	4.19	4.01	4.08	3.99	3.83	3.88	3.75	3.88	2.94
1981/82	3.77	3.72	3.68	3.69	3.76	3.87	3.82	3.78	3.74	3.71	3.72	3.66	3.74	3.13
1982/83	3.49	3.37	3.34	3.38	3.36	3.43	3.49							3.36
Sorghum:														
1979/80	2.55	2.68	2.51	2.48	2.45	2.45	2.41	2.43	2.44	2.47	2.40	2.45	2.48	2.12
1980/81	2.58	2.94	3.06	3.18	3.31	3.33	3.34	3.33	3.28	3.14	3.18	3.12	3.15	2.27
1981/82	3.03	2.96	2.65	2.37	2.34	2.36	2.39	2.44	2.42	2.43	2.47	2.61	2.54	2.42
1982/83	2.60	2.57	2.49	2.44	2.26	2.34	2.41							2.57
							Cornbelt (Soft Red Winter) 3/							
Wheat:														
1979/80	3.85	4.01	3.86	3.93	4.00	3.87	3.99	4.03	4.11	3.82	3.59	3.62	3.89	2.48
1980/81	3.58	3.82	4.02	4.19	4.41	4.59	4.50	4.50	4.28	4.03	4.00	3.59	4.13	3.00
1981/82	3.35	3.46	3.36	3.45	3.56	3.68	3.70	3.71	3.40	3.36	3.42	3.23	3.47	3.20
1982/83	3.18	3.08	2.98	2.89	2.75	3.02	3.13							3.56
Corn:														
1979/80	2.78	3.02	2.88	2.81	2.59	2.48	2.71	2.66	2.65	2.63	2.60	2.68	2.71	2.31
1980/81	2.76	3.06	3.28	3.36	3.28	3.46	3.53	3.54	3.58	3.58	3.57	3.56	3.38	2.46
1981/82	3.47	3.44	3.11	2.76	2.64	2.52	2.54	2.74	2.63	2.66	2.77	2.86	2.85	2.62
1982/83	2.82	2.76	2.57	2.30	2.09	2.29	2.48							2.78
							Northern Plains (Spring and Durum) 4/							
Other spring														
1979/80	3.50	3.69	3.59	3.65	3.74	3.64	3.57	3.48	3.55	3.53	3.60	3.73	3.61	2.51
1980/81	3.82	4.04	3.95	3.96	4.15	4.24	4.18	4.23	4.19	4.15	4.25	4.24	4.12	3.02
1981/82	4.12	3.93	3.70	3.62	3.66	3.74	3.63	3.69	3.67	3.61	3.73	3.69	3.73	3.21
1982/83	3.62	3.59	3.46	3.45	3.44	3.51	3.47							3.57
Durum:														
1979/80	N	O	T		A	V	A	I	L	A	B	L	E	2.51
1980/81														3.02
1981/82	4.52	3.91	3.52	3.41	3.51	3.55	3.47	3.60	3.67	3.52	3.54	3.52	3.64	3.21
1982/83	3.50	3.36	3.10	3.09	3.19	3.25	3.16							3.57
							Pacific Northwest (White) 5/							
Wheat:														
1979/80	3.98	3.93	4.12	4.03	3.91	3.89	3.73	3.68	3.80	3.71	3.66	3.56	3.83	2.57
1980/81	3.53	3.71	3.67	3.80	4.03	4.12	4.08	4.05	4.06	4.11	4.02	4.08	3.94	3.08
1981/82	3.97	3.69	3.78	3.80	3.94	3.96	3.98	3.91	3.75	3.68	3.72	3.71	3.82	3.29
1982/83	3.71	3.62	3.74	3.76	3.86	3.91	3.98							3.65
Barley:														
1979/80	2.69	3.08	3.00	3.09	3.07	3.34	3.10	3.10	3.10	3.18	3.21	3.12	3.09	2.26
1980/81	3.16	3.34	3.32	3.35	3.70	3.80	3.99	4.07	4.15	4.07	3.95	3.99	3.74	2.40
1981/82	3.72	3.39	3.19	3.10	3.08	3.34	3.20	3.24	3.21	3.39	3.41	3.45	3.31	2.55
1982/83	3.25	3.02	3.11	2.73	2.58	2.70	2.94							2.71
							U.S. Average							
Wheat:														
1979/80	3.72	3.89	3.74	3.87	3.98	3.94	3.81	3.74	3.78	3.64	3.58	3.69	6/3.78	2.50
1980/81	3.69	3.81	3.94	3.99	4.19	4.32	4.22	4.21	4.17	4.09	4.07	3.95	6/3.91	3.00
1981/82	3.70	3.62	3.62	3.65	3.77	3.85	3.80	3.78	3.70	3.67	3.68	3.64	6/3.65	3.20
1982/83	3.39	3.26	3.34	3.38	3.43	3.48	3.51							3.55

1/To adjust price to relative feed value multiply: corn 1.00; wheat 1.05; barley .90; sorghum .95; reported in Consumption of Feed by Livestock, Report No. 79, ERS, USDA. 2/Kansas, Nebraska, Texas, Oklahoma, and Colorado. 3/Ohio, Indiana, Illinois, and Missouri. 4/North Dakota, South Dakota, and Minnesota. 5/Washington, Oregon, and Idaho. 6/Season average price includes allowance for unredeemed loans and purchases.

Table 9--Wheat: Cash prices for leading classes at major markets, 1979-82

Year	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Simple average
						Dollars per bushel							
						Kansas City, No. 1 Hard Red Winter (ordinary protein)							
1979/80	4.17	4.34	4.12	4.26	4.39	4.53	4.51	4.33	4.32	4.07	3.90	4.10	4.25
1980/81	4.07	4.21	4.31	4.45	4.70	4.89	4.54	4.60	4.47	4.35	4.48	4.36	4.45
1981/82	4.24	4.25	4.14	4.19	4.31	4.46	4.35	4.33	4.26	4.25	4.28	4.22	4.27
1982/83	4.06	3.74	3.70	3.75	3.61	3.86	3.98						
						13% protein							
1979/80	4.22	4.42	4.28	4.39	4.55	4.67	4.60	4.40	4.35	4.14	3.96	4.14	4.34
1980/81	4.12	4.25	4.34	4.49	4.70	4.91	4.60	4.67	4.50	4.40	4.57	4.44	4.50
1981/82	4.36	4.26	4.16	4.22	4.29	4.44	4.33	4.35	4.32	4.29	4.32	4.24	4.30
1982/83	4.15	4.12	4.00	3.94	3.80	4.09	4.24						
						Chicago, No. 2 Soft Red Winter							
1979/80	4.36	4.39	4.23	4.28	4.30	4.13	4.26	4.36	4.39	4.18	3.96	4.04	4.24
1980/81	3.96	4.17	4.21	4.38	4.70	4.92	4.54	4.57	4.34	4.15	4.18	3.80	4.33
1981/82	3.60	3.70	3.70	3.87	3.97	4.08	3.86	3.77	3.57	3.59	3.70	3.43	3.74
1982/83	3.31	3.36	3.35	3.18	2.98	3.33	3.23						
						St. Louis, No. 2 Soft Red Winter							
1979/80	4.08	4.18	4.04	4.08	4.02	4.10	4.28	4.26	4.32	4.11	3.80	3.93	4.10
1980/81	3.73	4.10	4.19	4.42	4.78	4.96	4.78	4.80	4.57	4.32	4.36	3.67	4.39
1981/82	3.41	3.54	3.56	3.67	3.74	4.05	3.90	3.76	3.60	3.61	3.72	3.31	3.66
1982/83	3.25	3.27	3.14	3.06	3.06	3.38	3.28						
						Toledo, No. 2 Soft Red Winter							
1979/80	4.17	4.37	4.22	4.28	4.29	4.21	4.28	4.21	4.32	4.08	3.80	3.90	4.18
1980/81	3.84	4.14	4.16	4.38	4.82	5.02	4.65	4.70	4.47	4.16	4.16	3.76	4.36
1981/82	3.55	3.63	3.71	3.83	3.98	4.08	3.85	3.71	3.47	3.46	3.63	3.45	3.70
1982/83	3.35	3.36	3.28	3.09	2.84	3.19	3.23						
						Toledo, No. 2 Soft White							
1979/80	4.08	4.31	4.15	4.17	4.12	4.20	4.18	4.10	4.14	3.90	3.63	3.74	4.06
1980/81	3.71	4.05	4.15	4.31	--	--	4.44	4.49	4.21	3.87	3.87	3.62	4.07
1981/82	3.43	3.62	3.77	3.91	3.99	4.10	3.82	3.68	3.49	3.47	3.61	3.45	3.70
1982/83	3.35	3.49	3.42	3.22	2.92	3.22	3.29						
						Portland, No. 1 Soft White							
1979/80	4.46	4.67	4.45	4.31	4.13	4.16	4.10	4.10	4.26	4.13	4.02	3.91	4.22
1980/81	3.92	4.15	4.06	4.23	4.48	4.68	4.40	4.52	4.52	4.41	4.51	4.41	4.36
1981/82	4.26	4.27	4.25	4.21	4.38	4.42	4.00	4.12	4.09	4.02	4.14	4.24	4.20
1982/83	4.18	4.13	4.16	4.29	4.29	4.44	4.45						
						Minneapolis, No. 1 Dark No. Spring (ordinary protein)							
1979/80	4.23	4.31	4.10	4.18	4.31	4.27	4.18	4.06	4.13	4.04	3.94	4.21	4.16
1980/81	4.19	4.54	4.22	4.17	4.62	4.78	4.62	4.65	4.53	4.32	4.41	4.44	4.46
1981/82	4.29	4.18	4.03	4.07	4.22	4.29	4.15	4.21	4.17	4.10	4.21	4.16	4.17
1982/83	4.08	4.08	3.78	3.79	3.78	3.85	3.76						
						14% protein							
1979/80	4.32	4.42	4.19	4.29	4.45	4.29	4.17	4.07	4.08	4.02	3.96	4.31	4.21
1980/81	4.33	4.69	4.55	4.56	4.82	4.95	4.77	4.81	4.78	4.67	4.80	4.77	4.71
1981/82	4.56	4.50	4.25	4.23	4.29	4.38	4.22	4.28	4.21	4.16	4.25	4.20	4.29
1982/83	4.13	4.16	3.96	4.02	4.00	4.08	3.96						
						Hard Amber Durum, No. 1 (medium)							
1979/80	4.75	4.99	4.88	5.27	5.80	5.38	4.99	4.93	5.05	4.98	4.89	5.21	5.09
1980/81	5.79	7.12	7.19	7.26	7.34	7.22	6.90	7.07	7.02	6.66	6.10	6.04	6.81
1981/82	4.86	4.91	4.75	4.56	4.60	4.58	4.51	4.59	4.57	4.45	4.45	4.49	4.61
1982/83	4.38	4.26	4.07	4.02	4.11	4.17	4.07						

Source: Grain Market News, Agricultural Marketing Service.

Table 10--Wheat: Export prices by months, at selected ports, 1979-82

Year	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Simple average
						Dollars per metric ton							
						Gulf: No. 1 Hard Red Winter, Ordinary protein							
1979/80	168	175	169	174	178	178	180	176	173	164	156	161	171
1980/81	158	169	171	180	188	195	182	187	182	175	180	172	178
1981/82	169	168	170	171	169	179	175	173	171	169	170	168	171
1982/83	156	152	153	153	147	155	160						
						Gulf: No. 1 Soft Red Winter							
1979/80	164	169	163	165	163	164	172	170	168	162	153	154	164
1980/81	146	163	165	176	187	193	180	187	176	168	172	143	171
1981/82	133	136	140	147	150	157	151	148	142	144	149	128	144
1982/83	126	128	122	119	113	129	128						
						Portland: No. 2 Western White							
1979/80	171	178	167	163	160	157	155	157	162	157	155	148	161
1980/81	147	158	157	162	172	180	170	174	173	166	166	165	166
1981/82	159	159	161	161	165	166	152	155	152	152	155	157	158
1982/83	156	153	158	162	161	167	168						
						Duluth: No. 2 Northern Spring, 14% protein							
1979/80	163	166	1/	1/	167	158	1/	1/	1/	1/	146	158	159
1980/81	158	174	168	170	177	180	1/	1/	1/	1/	176	175	172
1981/82	170	164	159	156	158	161	1/	1/	1/	1/	164	154	161
1982/83	151	152	146	148	147	149	1/						

1/No price quotes available.

Source: Grain Market News, Agricultural Marketing Service.

Table 11--Wheat: Rotterdam, c.i.f., quotations by months, 1979-82 1/

Year	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Simple average
						Dollars per metric ton							
						United States No. 2 Hard Winter, 13.5%							
1979/80	193	204	200	205	209	212	212	200	200	197	NQ	NQ	203
1980/81	203	204	209	214	224	233	235	233	225	212	211	206	217
1981/82	203	204	201	200	200	212	206	200	199	198	206	204	203
1982/83	176	176	2/	2/	2/	2/	2/						
						United States Dark Northern Spring, 14%							
1979/80	192	202	194	199	205	204	205	206	205	196	188	199	200
1980/81	197	194	189	212	216	226	235	245	240	209	210	207	218
1981/82	197	194	189	190	193	196	190	204	204	195	190	184	194
1982/83	178	178	174	175	171	178	184						

1/Hamburg Mercantile Exchange prices for Rotterdam. 2/No price quotes available.

Source: World Grain Situation, Foreign Agricultural Service.

Table 12--Wheat and Wheat Flour: World trade, production, stocks, and utilization, July-June 1979-82

Country or region	1979/80	1980/81	1981/82	1982/83 as of Jan. 17
		Million metric tons		
Exports:				
Canada	15.0	17.0	17.8	20.0
Australia	14.9	10.6	11.0	7.5
Argentina	4.8	3.9	4.3	8.0
EC-10	10.4	14.7	15.5	17.0
USSR	0.5	0.5	0.5	0.5
All others	3.2	5.6	3.8	5.4
Total non-U.S.	48.8	52.3	52.8	58.4
USA 1/	37.2	41.9	49.1	43.5
World total	86.0	94.2	101.8	101.9
Imports:				
EC-10	5.3	4.5	4.7	4.2
USSR	12.1	16.0	19.5	19.0
Japan	5.6	5.8	5.6	5.6
E. Europe	6.1	5.9	6.4	4.6
China (Mainland)	8.9	13.8	13.2	14.0
All others	48.1	48.2	52.5	54.6
World total	86.0	94.2	101.8	101.9
Production: 2/				
Canada	17.2	19.3	24.8	27.6
Australia	16.2	10.9	16.3	8.5
Argentina	8.1	7.8	8.1	14.0
EC-10	48.8	55.1	54.4	59.4
USSR 3/	90.2	98.2	80.0	86.0
E. Europe	27.6	34.5	30.5	33.8
China (Mainland)	62.7	55.2	59.6	63.0
India	35.5	31.8	36.3	37.8
All other foreign	58.4	63.3	61.0	64.9
USA	58.1	64.6	76.2	76.4
World total	422.8	440.6	447.2	471.4
Utilization: 4/				
USA	21.3	21.1	23.3	23.4
USSR 3/	114.8	116.7	99.0	104.5
China (Mainland)	71.6	69.0	72.8	77.0
All other foreign	236.1	239.3	245.1	253.4
World total	443.8	446.1	440.2	458.3
Stocks, ending: 5/	79.9	74.4	81.9	95.0

1/Includes transshipments through Canadian ports; excludes products other than flour. 2/Production data include all harvests occurring within the July-June year shown, except that small grain crops from the early harvesting Northern Hemisphere areas are "moved forward;" i.e., the May 1979 harvests in areas such as India, North Africa, and Southern United States are actually included in "1979/80" accounting period which begins July 1, 1979. 3/"Bunker weight" basis: not discounted for excess moisture and foreign material. 4/Utilization data are based on an aggregate of differing local marketing years. For countries which stocks data are not available (excluding the USSR) utilization estimates represent "apparent" utilization, i.e., they are inclusive of annual stock level adjustments. 5/Stocks data are based on an aggregate of differing local marketing years and should not be construed as representing world stock levels at a fixed point in time. Stocks data are not available for all countries and exclude those such as China and part of Eastern Europe; the world stock levels have been adjusted for estimated year-to-year changes in USSR grain stocks, but do not purport to include the entire absolute level of USSR stocks.

Source: Foreign Agricultural Service. World Grain Situation.

Table 13--Rye: Supply, disappearance, area, and prices, marketing years 1978-82*

Item	1978/79	1979/80	1980/81	1981/82 (prel.)	1982/83 (proj.)
			Million bushels		
Supply					
Beginning stocks, June 1	4.0	9.0	12.2	4.1	3.1
Production	24.1	22.4	16.5	18.8	20.8
Imports	0.1	1/	1/	0.4	2.0
Total	28.2	31.4	28.7	23.4	25.9
Domestic disappearance					
Food	3.7	3.5	3.5	3.5	3.5
Industry	2.4	2.1	2.1	2.2	2.1
Seed	4.6	4.0	4.2	4.2	4.2
Feed 2/	8.1	7.1	7.3	8.9	8.5
Total	18.8	16.7	17.1	18.8	18.3
Exports	0.4	2.4	7.5	1.5	0.5
Total disappearance	19.2	19.2	24.6	20.3	18.8
Ending stocks, May 31	9.0	12.2	4.1	3.1	7.1
			Million acres		
Area					
Planted	2.9	2.9	2.5	2.6	2.6
Harvested	0.9	0.9	0.7	0.7	0.7
			Bushels per acre		
Yield per harvested acre	26.0	25.8	24.4	26.7	29.1
			Dollars per bushel		
Prices					
Received by farmers	1.99	2.06	2.63	2.99	2.45
Minneapolis No. 2	2.44	2.47	3.35	3.80	
Loan rate	1.70	1.79	1.91	2.04	2.17

1/ Less than 50,000 bushels.

2/ Residual, approximates total feed use.

* Totals may not add due to rounding.

Table 14--Rye: Marketing year supply and disappearance, specified periods, 1980-82

Year and period	Supply				
	Beginning stocks	Production	Imports	Total supply	Ending stocks
	- - -1,000 bushels- - -				
1980/81					
June-Sept.	12,192	16,483	5	28,680	18,510
Oct.-Dec.	18,510	---	1	18,511	9,346
Jan.-Mar.	9,346	---	4	9,350	6,868
Apr.-May	6,868	---	1/	6,868	4,145
Mkt. year	12,192	16,483	10	28,685	4,145
1981/82					
June-Sept.	4,145	18,822	33	23,000	14,551
Oct.-Dec.	14,551	---	6	14,557	7,882
Jan.-Mar.	7,882	---	72	7,954	5,785
Apr.-May	5,785	---	321	6,106	3,095
Mkt. year	4,145	18,822	432	23,399	3,095
1982/83 2/					
June-Sept.	3,095	20,817	821	24,733	16,460
Oct.-Dec.	16,460	---	1,044	17,504	10,871
Jan.-Mar.	10,871				
Apr.-May					
Mkt. year					

Year and period	Disappearance						
	Domestic use					Exports	Total disappearance
	Food	Seed	Industry	Feed 3/	Total		
	- - -1,000 bushels- - -						
1980/81							
June-Sept.	1,150	2,075	370	3,364	6,959	3,211	10,170
Oct.-Dec.	960	1,868	486	2,726	6,040	3,125	9,165
Jan.-Mar.	821	207	707	30	1,765	717	2,482
Apr.-May	584	---	487	1,211	2,282	441	2,723
Mkt. year	3,515	4,150	2,050	7,331	17,046	7,494	24,540
1981/82							
June-Sept.	1,170	2,080	419	4,732	8,401	48	8,449
Oct.-Dec.	881	1,872	624	1,939	5,316	1,359	6,675
Jan.-Mar.	885	208	779	187	2,059	110	2,169
Apr.-May	522	---	420	2,057	2,999	12	3,011
Mkt. year	3,458	4,160	2,242	8,915	18,775	1,529	20,304
1982/83 2/							
June-Sept.	1,162	2,120	529	4,369	8,180	93	8,273
Oct.-Dec.	885	1,908	650	3,161	6,604	29	6,633
Jan.-Mar.							
Apr.-May							
Mkt. year							

1/ Less than 500 bushels. 2/ Preliminary. 3/ Residual; approximates total feed use.

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